Why should human geographers think about climate change?

Learning Objectives:

- To understand some of the human impacts of climate change
- To understand how climate change impacts some groups of people more than others

Task 1: Answer in your books

- 1. Name the main greenhouse gas
- 2. Define the term 'climate change'
- 3. Define the term 'fossil fuels'
- 4. Describe the 'enhanced greenhouse effect'
- 5. Describe how climate change can lead to either (a) more wildfires or (b) more storms
- 6. Explain why some people may feel 'eco-anxiety'

- 1. Main Greenhouse Gas: Carbon dioxide (CO2).
- 2. Climate Change: A long-term change in the average weather patterns that have come to define Earth's local, regional, and global climates.
- **3. Fossil Fuels:** Natural fuels formed from the remains of ancient plants and animals, such as coal, oil, and natural gas.
- **4. Enhanced Greenhouse Effect:** The strengthening of the greenhouse effect due to increased levels of greenhouse gases in the atmosphere from human activities, leading to more heat being trapped and a rise in Earth's average temperature.
- 5. Climate Change Leading to More Wildfires or Storms:
 - (a) **More Wildfires:** Higher temperatures and prolonged droughts dry out vegetation, making it more flammable and increasing the risk and intensity of wildfires.
 - (b) More Storms: Warmer temperatures cause more water to evaporate and warmer air holds more moisture, leading to more energy in weather systems and increasing the frequency and intensity of storms.
- **6. Eco-Anxiety:** Some people may feel eco-anxiety due to growing concerns about the irreversible impacts of climate change, feeling overwhelmed by the scale of environmental crises and the perceived inaction of governments and individuals to mitigate these issues.

Climate Change impacts people at different scales

- Local: impacts on specific communities, such as a coastal town suffering from sea level rise
- Global: impacts that will be felt around the world, for example the loss of biodiversity

Task 2: Define 'local' and 'global' impacts and add your own examples!

Climate Change impacts people in different ways....

- **Social:** impacts on different groups of people. This can include:
 - Mobility: the movement of people because of sea-level rise, storms, droughts, and other such impacts related to climate change.
 - Race: how climate change exacerbates other issues such as racial inequalities
 - Income: how lower income people are affected by climate change more than their rich counterparts

Task 3: How might mobility, race and income affect people's experiences of climate change?

Climate change impacts the world in different ways...



POLITICAL: Some countries feel that other countries are not taking climate change seriously enough



ECONOMIC: Damage to crop, houses, and businesses from extreme weather



ENVIRONMENTAL: The loss of ecosystems such as coral reefs

Indigenous Peoples are distinct social and cultural groups that share collective ancestral ties to the lands and natural resources where they live, occupy or from which they have been displaced.

How might these communities be affected by climate change?



Avada17/Pixabay

Task 4: Look at the impacts of climate change on the next slide. For each impact, complete the following tasks.

Firstly

Decide whether each impact is more 'local' or 'global'

Secondly

Decide whether each impact is social, economic, environmental or political

Thirdly

For each impact which is 'social', decide whether it is to do with race, mobility or income

Americans, are more heavily impacted by climate change. Majority black, Hispanic or Native American districts hundreds of workers die every year due have 50% greater vulnerability to to heat stress. The numbers dying is wildfire compared with other groups likely to increase as climate change makes it hotter. Changing rainfall patterns leading to drought or intense flooding which may seals and other marine animals, lead to issues of water availability impacting the food security and

Impact on local indigenous people's

During Hurricane Katrina and Hurricane

predominately African American that

Harvey in the USA it was

neighbourhoods that were

were most severely affected

way of life

Studies have shown that people of

colour in America, and especially Black

Qatar has over 2 million migrant

workers, mainly from countries like

India, Pakistan, Bangladesh and Nepal.

Many of these work in construction and

Melting sea ice makes it harder to hunt

traditional way of life for indigenous

According to global charity UNICEF,

23.9 million people were involuntarily

displaced by weather-related disasters

Biodiversity loss. Since 1970 WWF

estimates wildlife populations have

dropped by 69%

communities

Developing countries are angry that

meet their promise to mobilise \$100

Richer people, who contribute more to

the causes of climate change, generally suffer the least. Richer countries like

the UK and USA can afford expensive

climate adaptations. Poorer low-lying countries like the Maldives cannot,

even though they dot contribute much

Farmers in Uganda are forced to move

from their home due desertification

Studies show that poor communities

are more at risk from climate fire

and agricultural land becoming

flood defence barriers and other

to climate change.

unfarmable

related issues

developed countries have failed to

billion per year in climate finance

Melting ice caps are going to cause an

increase in sea levels around the world.

They are currently rising by between 3

and 5 mm a year and could rise by over

Intense heatwaves and droughts are

impacting agriculture and increasing

Increased coastal erosion is making

people's homes vulnerable to flooding

Changing fishing patterns, for example

40% of potential seafood catch is

estimated to drop by 2050 due to

climate change

a metre by 2100.

the risk of famine

Social impacts: mobility, race and income

Take the following three impacts. Which factor do they relate to?

- 1. Studies have shown that people of colour in America, and especially Black Americans, are more heavily impacted by climate change. Majority black, Hispanic or Native American districts have 50% greater vulnerability to wildfire compared with other groups
- 2. Qatar has over 2 million migrant workers, mainly from countries like India, Pakistan, Bangladesh and Nepal. Many of these work in construction and hundreds of workers die every year due to heat stress. The numbers dying is likely to increase as climate change makes it hotter.
- 3. Richer people, who contribute more to the causes of climate change, generally suffer the least. Richer countries like the UK and USA can afford expensive flood defence barriers and other climate adaptations. Poorer low-lying countries like Kiribati cannot, even though they do not contribute much to climate change.

Task 5: Think, pair, share: How is climate change related to issues of mobility, race and income? Pick one of these and in your book write about how one of these issues is related to issues of either mobility, race or income?

Reading: Climate and Race

Read the adapted article: Why climate change is inherently racist?

https://www.bbc.com/future/article/20220125-why-climate-change-is-inherently-racist

"Eco-anxiety" – the fear of environmental doom

One study (Hickman, 2021) showed that people across all countries were worried about climate change (59% were very or extremely worried and 84% were at least moderately worried). More than 50% reported each of the following emotions: sad, anxious, angry, powerless, helpless, and guilty. More than 45% of people said their feelings about climate change negatively affected their daily life, and many reported a high number of negative thoughts about climate change (e.g., 75% said that they think the future is frightening and 83% said that they think people have failed to take care of the planet). Peoplé rated governmental responses to climate change negatively and reported greater feelings of betrayal than of reassurance. Climate anxiety and distress were correlated with perceived inadequate government response and associated feelings of betrayal

Class activity: Choose one emotion that best describes how you feel about climate change.

10 minutes



Markus Spiske/Unsplash

Climate change affects people differently? Do you agree.



Jan Kahánek/Unsplash

10 minutes

Success criteria

Prompts

Using the statements from the shading activity, write a letter response to this statement

In the introduction set out whether you agree or disagree

- Local
- Global
- Social